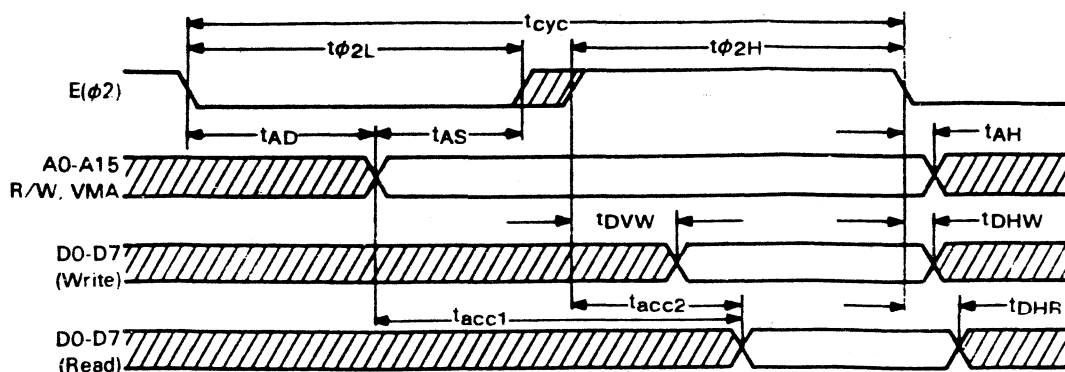


FIGURE 1 — SYSTEM TIMING DIAGRAM



PHYSICAL DIMENSIONS

Parameter	Millimeters	Inches
Width	209.6	8.25
Height	177.8	7.00
PC Board Thickness	1.58	0.062
Clearance Required (Component Side)*	10.16	0.4
Clearance Required (Solder Side)*	2.54	0.10

*Measured from surface of PC board.

TABLE 1 — BUS CONNECTOR PIN AND SIGNAL LIST

Pin No.	Signal	Pin No.	Signal
1	GND	31	A1
2	E(φ2)	32	A2
3	+5 V Standby*	33	A3
4	+5 V	34	A4
5	BS*	35	A5
6	Open*	36	A6
7	BREQ*	37	A7
8	MEMRDY*	38	A8
9	VMA	39	A9
10	BA*	40	A10
11	R/W	41	A11
12	GND	42	A12
13	Reset*	43	A13
14	NMI*	44	A14
15	IRQ*	45	A15
16	Halt*	46	GND
17	FIRQ*	47	GND
18	Qout*	48	D0
19	GND	49	D1
20	Key	50	D2
21	ROP0	51	D3
22	ROP1	52	D4
23	ROP2	53	D5
24	RAP0	54	D6
25	RAP1	55	D7
26	RAP2*	56	+12 V
27	I/O 1	57	GND
28	I/O 2*	58	-12 V
29	Active*	59	+5 V
30	A0	60	GND

*Reference only. Not used for this module.

Signal	Definition
A0-A15	Address lines from processor
D0-D15	Bidirectional data lines
R/W	Read/Write control. Active Low for Write cycle
VMA	Active High signal indicates valid memory address on bus
E(φ2)	Clock signal. Active Low transition at start of cycle, Active High transition at midpoint of cycle
Qout	Available from MC6809 only. Active High transition indicates stable address bus. Active Low transition during Read cycle indicates stable data bus
MEMRDY	Active High level enables negative transition of E(φ2)
BREQ	Available only on MC6809. Active Low level disables positive transition of E(φ2)
BA	Active High level indicates processor is not using bus
BS	Bus status output available only on MC6809. Used with BA to indicate processor status. (Normal operation, Bus Available, Interrupt Acknowledge, SYNC Instruction Acknowledge)
Reset	Active Low signal initiates system Reset
NMI	Active Low signal requests processor interrupt. FIRQ is available only on MC6809
Halt	Active Low signal requests processor to idle after completion of current instruction
ROP0-ROP2*	Used to map ROM into one of eight pages
RAP0-RAP2*	Used to map RAM into one of eight pages
I/O 1, I/O 2	Address decode for addresses \$8000-\$807F and \$8080-\$80FF, respectively
Active*	Signal used to alter MEK6800D2 address map
Key	Physical alignment aid

